

MODIS Technical Team Meeting
Thursday, February 6, 2003
Building 33, Room E125

Vince Salomonson chaired the meeting. In attendance were Barbara Conboy, Ed Masuoka, Wayne Esaias, Dorothy Hall, Jack Xiong, Steve Kempler, Chris Justice, and Skip Reber, with Yolanda Harvey taking the minutes.

1.0 Upcoming events

- Data Products Review March 10-11, 2003
- Ocean Color Meeting, April 15-17, 2003, Miami, Florida, USA.
- IGARSS 2003, July 21-25, 2003, Toulouse, France (abstracts due by January 17, 2003). <http://www.igarss03.com/>
- 10th International Symposium on Remote Sensing by The International Society for Optical Engineering (SPIE). September 8-12, 2003, Barcelona, Spain (abstracts due by February 10, 2003). <http://www.spie.org/info/rs>

2.0 Meeting Minutes

2.1 General Discussion

Salomonson reported that MODIS is expected have approximately three hours on the first day of the Headquarters Data Products Review, starting at 1:45 p.m.

Conboy reported that the Science Team Meeting, which will be held via telecon, is on February 12th. The room for physical participants has changed to Building 33 Room G133, not H114.

Salomonson reported that he has been in the process of determining how many MODIS papers have been published over the years. He was able to get a count of MODIS papers as identified in the Web of Science. This information shows that the number of MODIS papers in the refereed literature has been growing every year. He also reported that Yolanda Harvey and Brandon Maccherone are currently ingesting publications produced by the MODIS Science Team into the MODARCH database.

2.2 Instrument Status

2.2.1 Terra MODIS

Xiong reported that on Saturday February 1, 2003, there was an instrument anomaly with the Spacecraft Science Formatter Equipment (SFE), which resulted in the loss of one day of data (a total of 19 hours of data). The anomaly was caused by the A-side High-rate Packet Multiplexer (HPM).

There will be two Deep Space Maneuvers – the first on March 26th, and the second on April 14th, with the Moon in Earth View. A third one is also planned for contingency.

On the L1B data issue, Xiong reported that MCST has started submitting regular bi-weekly LUT updates starting with version 4.1.2.1 for Terra.

2.2.2 Aqua MODIS

Xiong reported that the issue with the SRCA lamps is still being investigated.

The Aqua LUT has been updated to version 4.1.3.1, but has not been updated regularly.

2.3 DAAC

Kempler reported that in January, Aqua processed at 1x, and Terra processed at 3.89x. The rates are lower because of the ingest problems.

Reprocessing is about 38.4% complete, and the Oceans Level 2 subsetter has been delivered and is now in use. Reber asked about the status of the Data Pools, and Kempler replied that they lost two disks, but they were repaired. The Data Pools are sluggish, and there are a lot of things hitting the Pools and the archives. On a positive note, Kempler reported that this issue is helping the DAAC to understand the impacts of large orders on archive ordering speeds.

Kempler reported that overall, things are going well: they're putting 2.5 to 3 terabytes per day into the Goddard DAAC. Salomonson noted that the public is ordering about 1 to 1.5 terabytes of data per week, so they're still having a data access problem. Kempler replied that they are building more tools in response to what the public wants to help the problem. Salomonson noted that there is also a lot of data going into the other DAACs.

2.4 MODAPS

Masuoka reported that Robert Wolfe and Mike Teague attended the Science Advisory Panel Meeting for the EDC DAAC. While at the meeting Robert Wolfe also worked some of the issues associated with Land product browse.

Masuoka reported that the Goddard DAAC and MODAPS are working issues of PDR server performance during file transfers over Gigabit Ethernet. Hardware upgrades to the PDR server due to be installed this month, should alleviate the problem.

Masuoka reported that MODAPS was having some problems with I/O performance to disk storage but the problem, which was due to a setting on the disk controller, has been resolved. Salomonson asked if the aggregate of forward processing and reprocessing is going well, and Kempler said yes, that the Data Pool buffer is helping. Salomonson asked if Collection 4 will be completed by November, and Masuoka said yes. Salomonson asked if the forward processing of Ocean Color data is provisional, and Esaias said yes; it will be validated for the period of November 1, 2000, through March 13, 2002, and provisional for other dates. Salomonson noted that Ocean Color wouldn't be completely validated until November 2003 for Collection 4. Reber expressed some confusion about what parts of Collection 4 are validated and provisional, and Esaias gave an explanation about how some of the LUTs used at the beginning of the mission weren't as consistent as the LUTs are now (because of uncertainties with calibration), which creates some inconsistency in the data, such as with the visible spectrum (which affects Ocean Color, but not SST) in the forward stream of Collection 4. It's for this reason that they're declaring products validated on a product-by-product and time-by-time basis instead of declaring all of Collection 4 validated or provisional.

2.5 Land Discipline

Justice reported that the Land team is getting organized for the HQ review, the Land PIs are getting their websites up, and that they've developed a standard template for reporting on validation collections.

2.6 Oceans Discipline

Esaias reported that the Oceans group held a successful workshop at the University of New Hampshire, at which 81 people attended for two days. Esaias noted that there were a few attendees from Europe, Puerto Rico, and South America. There were a number of people there from the Oceans Team, some Quality Assurance people, Daryl Niclaus from the DAAC, and Esaias observed that overall they got a lot of positive feedback and comments on what the team is doing and needs to do for distribution. Justice asked if there was a place to see the presentations given at the workshop, and Esaias said that the agenda is on the University of New Hampshire's website, the agenda will go up on the Land site, and the presentations will be put up on an ftp site. Esaias also noted that Chuck Trees from HQ attended the workshop. Esaias said that at the workshop he explained the MODIS forward data has stripes, and explained to them why and how they're going to improve the data using m1 data for correction. Esaias noted that there were 8 Direct Broadcast users at the workshop, and their main comment was that they're looking forward to more subsetting. He said he also talked about browses and applications. Kempler asked if there were any suggestions/comments on distribution, and Esaias said that Oceans would be getting all that put together and send out to people.

Esaias reported that there are plans for a NASA-wide workshop in Miami, Florida, for April 15-17, and that he's expecting good turnout. Esaias said that he would also like to have some tutorials the workshop because so many NASA scientists working with oceans data are going to be there.

2.7 Cryosphere

Hall reported that she participated in a telecon with the NSIDC last Monday about developing a browse product, and that there will be another next week. They're trying to get a prototype EDG browse product before this next meeting, so they're very excited about that. Hall also reported that the MOD 10A1 product is the most popular product at the NSIDC.

Hall reported that she's received good news from people using MODIS snow maps. Investigators from the University of Washington have published a paper in Hydrological Processes that compared MODIS to the NOAA NOHRSC product, and got better results with MODIS. Another person from Canada has been using MOD 10A1, and found that the MODIS snow map data compared well with their hydrological model, though they would like real time MODIS snow maps. Justice reported that he's met with Bruce Ramsay, who some interest in that rapid response for snow cover, and so the three of them should probably have a meeting to discuss it.

3.0 Action Items

3.1 New Action Items

None.

3.2 Old Action Items

3.2.1 King and Kempler to work together on getting ESDTs for the new Atmospheres L2 data product.

Status: Open.

3.2.2 Kempler to coordinate with Oceans group on creating documentation for the DAAC on the new Oceans L1A data subsets.

Status: Open.

3.2.3 Wolfe to contact Herring about the shopping cart feature for the Earth Observatory website.

Status: Open.

3.2.4 Tech Team to further discuss TRW using MODIS data for validation of the NPP/NPOESS production process.

Status: Open.

3.2.5 Masuoka to send out an explanation of ICD ESDTs to the Technical Team.

Status: Closed. Masuoka had Science Discipline Data Team leads review the ESDTs in the MODIS ICD. Everyone was fine with them and the ICD is going through the process of being baselined by ECS.

3.2.6 Funded MODIS Science Team Members to send a list of the number of advanced degrees (Master and Doctorate) produced as a result of funding support, etc., of your MODIS investigations to Barbara Conboy by February 5, 2003.

Status: Closed. All pertinent Science Team Members responded.